



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,702	08/26/2003	Christopher Leger	2912-001	4046
42389	7590	11/30/2005	EXAMINER	
DORT PARTNERS IP PLLC PATENTS BOX 66148 WASHINGTON SQUARE STATION WASHINGTON, DC 20035			HESS, DANIEL A	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/648,702

Applicant(s)

LEGER ET AL.

Examiner

Daniel A. Hess

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is in response to applicant's amendment of 11/9/2005. See notably the response to amendment, below.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-13, 15, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over an Internet article from 3/28/2001 or earlier by the University of Washington Precision Forestry Cooperative entitled "RFID" in view of Bolavage et al. (US 2002/0084889). The article will be hereinafter referred to as PFC.

Re claims 1, 15: PFC teaches the following:

- An RFID tag is inserted into a tree, as is shown in the drawing.
- This tag is read by a reader.
- The tag contains information, namely an ID number.
- Since a stated goal is to track trees from seedlings, it is understood that at least one subsequent scan occurs, after the tag is inserted into the tree.

Art Unit: 2876

- Conservation easement is discussed, which falls in the category of forestry management.

Lacking in PFC is a teaching that the tag is embedded by making a hole in a mature tree, such that the tag has a negligible physiological impact.

Bolavage et al. (2002/0084889) teaches (paragraph [0006]) “Tags can be screw-shaped to identify trees or wooden items...” Clearly, this means making a hole, leaving a relatively small mark (that would not be very visible) and not damaging a tree.

In view of Bolavage’s teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a tag having a much smaller profile using a little screw transponder as taught by Bolavage et al. in the teachings of PFC because this result in a much more pleasing-looking tree. Clearly, a screw-transponder could be inserted into any kind of tree including a mature tree.

Re claim 2: That the physiological impact on the tree is negligible is implicit in PFC. A purpose of the tagging is conservation; harming a tree would be in direct contradiction to this.

Re claim 3: This claim is very subjective; RFID tags generally are not large, so the visual mark from one would not be great.

Art Unit: 2876

Re claims 4 and 5: The figure of PFC shows the tag inserted into the trunk, near the base.

Re claims 6, 19: That tags are written to is not explicitly taught by PFC. Nevertheless, many smart tags have for a number of years been writable. For example, this examiner has known of a writable RFID tag for Metrorail transport since prior to the invention by the applicant.

In view of this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known writeability of Metrorail RFID systems in tree marking because conservation easements could change with changing politics and laws.

Re claim 7: The markers in PFC are described as being for a conservation easement, which constitutes an environmental assessment.

Re claim 8: PFC includes a discussion of 'database possibilities' in which a database associates an ID stored on the tag with information about that tree in a database, the database being clearly on a computer that is remote from the trees.

Re claim 9-12: All of these aspects are incorporated in the discussion of 'database possibilities' in PFC. 'Conservation easement' of PFC amounts to instructions on how to manage a tree. Also, information on the type of tree amounts to information about when it should be harvested, i.e. different trees mature at different rates. Also, if a tree is

part of a 'Conservation easement,' that will give another answer for when to harvest – never.

Re claim 13: This is inherent in PFC: The scanning system reads the tag; this data must be interchanged with the database through some link.

Re claim 16: PFC explicitly describes the tag on the tree as passive.

Re claim 18: See discussion re claims 1 and 8, above. Also, information on the type of tree (PFC) amounts to information about when it should be harvested, i.e. different trees mature at different rates. A screw would remain in the tree even after it is cut down.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over PFC/Bolavage as applied to claim 1 above, in view of Cybulski et al. (US 6,669,089).

PFC/Bolavage as applied to claim 1 above is used to track trees, but does not teach that a scanner is mounted on a vehicle.

Cybulski et al. teaches (figure 7 is exemplary) a series of interrogators 280 mounted on a forklift 290 for interrogating that which the forklift is transporting. Such interrogators could certainly interact with RFID transponders in lumber that is being carried.

In view of Cybulski et al.'s teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an interrogator on a vehicle because this

Art Unit: 2876

conveniently allows a worker to more quickly handle wood and trees than he/she would be able to on foot.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over PFC/Bolavage as applied to claim 1 above in view of Mosher, Jr. (US 5,973,600).

PFC/Bolavage's system is passive.

Many tags, including Mosher, Jr.'s (see abstract) can be in either passive or active mode.

In view of Mosher, Jr.'s teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the old and well-known active transponder means because an active transponder can yield a stronger signal and greater range.

***Allowable Subject Matter***

Claim 20 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or fairly suggest a tree tagging system wherein a first tag is inserted into a harvested portion of a tree and a second tag is inserted into a stump portion that is not harvested such that tags match one other, in the context of the configuration claimed in claim 20.

*Response to Amendment*

The examiner notes that a substantial body of prior art teaches embedding transponders in wood in a way that is much less visible than is taught in ‘Precision Forestry Cooperative’ references cited recently.

The examiner further observes that terms such as ‘negligible physiological impact’ and ‘minimal visual mark’ are quite imprecise and thus get limited weight. For example, a future transponder might be even smaller and leave an even less noticeable mark.

Some of the many examples of embedding tags in a less-visible way in wood follow:

Bolavage et al. (2002/0084889) teaches (paragraph [0006])

“[0006] RFID tags come in a wide variety of shapes and sizes. Animal tracking tags, inserted beneath the skin, can be as small as a pencil lead in diameter and one half inch in length. **Tags can be screw-shaped to identify trees or wooden items**, or credit-card shaped for use in access applications.

The anti-theft hard plastic tags attached to merchandise in stores are also RFID tags, as are heavy-duty five by four by two inch rectangular transponders used to track intermodal containers, or heavy machinery, trucks, and railroad cars for maintenance and tracking applications.”



Art Unit: 2876

**Clearly, this means making a hole, leaving a relatively small mark (that would not be very visible) and not damaging a tree.**

Bodin et al. (US 2003/0038172) teaches (paragraph [0032]) :

[0032] RFID tags come in a wide variety of shapes and sizes. Animal tracking tags, inserted beneath the skin, can be as small as a pencil lead in diameter and one-half inch in length. **Some tags are screw-shaped to identify trees or wooden items**, or credit-card shaped for use in access applications. The anti-theft hard plastic tags attached to merchandise in stores are RFID tags. In addition, heavy-duty 5 - by 4 - by 2-inch rectangular transponders used to track intermodal containers or heavy machinery, trucks, and railroad cars for maintenance and tracking applications are RFID tags.

*Miraculously, Bodin et al. appears to be virtually identical to Bolavage et al., even though they used different law firms, are in different parts of the country, and have different assignees and inventors. That is beyond the purview of the present case, however.*

Bodin et al. (US 2003/0144926), paragraph [0042] teaches something similar.

**Leavitt et al. (US 4,373,159) teaches (column 2, lines 45-50) a transponder embedded in a fastener such as a screw which could meet Bolavage et al.'s description, filed some twenty-five years ago.**

Art Unit: 2876

“Also in accordance with the present invention, a **miniature radar transponder** is positioned within the carrier, such as a **fastener**, for transmitting a coded identification signal to locate.” See also the figures which show a screw.

Brady et al. (US 6,441,740) teaches (column 7, lines 10-15) an rfid tag hidden in a cavity in wood.

Lake et al. (US 2001/0004237) teaches [0016] a transponder embedded in a hole in wood to sense termites.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DH  
11/17/05

**DANIEL STCYR**  
**PRIMARY EXAMINER**

